



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 6
1445 ROSS AVENUE, SUITE 1200
DALLAS, TX 75202-2733

August 20, 2012

CERTIFIED MAIL 7011 0110 0001 3590 2386 RETURN RECEIPT REQUESTED

REPLY TO: 6WQ-SG

Mr. Shawn Ward
SHE Manager
Cornerstone Chemical Company
10800 River Road
Waggaman, LA 70094

RE: Cornerstone Chemical Company (Cornerstone) Final Injection Well Petition Reissuance Decision

Dear Mr. Ward:

Effective the date of this letter, the Environmental Protection Agency (EPA) approves the reissuance request for an exemption to the land disposal restrictions for Wells 2, 3, 4B and 5, located at the Cornerstone Fortier Manufacturing Complex in Waggaman, Louisiana.

The land disposal restrictions prohibit the injection of hazardous waste unless a petitioner can demonstrate to EPA, to a reasonable degree of certainty, that there will be no migration of hazardous constituents from the injection zone for as long as the wastes remain hazardous. The land disposal restrictions for injection wells codified in 40 CFR Part 148, provide the standards and procedures by which petitions to dispose of an otherwise prohibited waste by injection will be reviewed and by which exemptions pursuant to these petitions will be granted or denied.

A letter dated June 22, 2012, informed Cornerstone that EPA was proposing to approve a petition reissuance request for an exemption to the land disposal restrictions. The public comment period associated with this decision began on June 28, 2012, and closed on August 13, 2012. No comments were received.

Based on a detailed technical review of the submitted petition reissuance request and support documents, EPA has determined that this information for the Cornerstone facility meets the requirements of 40 CFR Part 148 by demonstrating no migration of hazardous constituents from the injection zone for 10,000 years.

The following are conditions of this land disposal restrictions exemption:

Petition Reissuance Approval Conditions

This reissuance of an exemption to the land disposal restrictions to allow the continued injection of restricted hazardous wastes is subject to the following conditions, which are necessary to assure that the standard in 40 CFR §148.20(a) is met. Noncompliance with any of these conditions is grounds for termination of the exemption in accordance with 40 CFR §148.24(a)(1). This exemption is applicable to the Cornerstone injection wells, Wells 2, 3, 4B, and 5, located at the Fortier Manufacturing Complex in Waggaman, Louisiana.

1. Injection of restricted waste shall be limited to the following injection zone:

<u>Well</u>	<u>Depth of Injection Zone</u>
2	2000' - 6166'
3	2000' - 6166'
4B	2013' - 6166'
5	2000' - 6166'

(All depths are approximate below ground level (BGL). Depths for Wells 2, 3, and 5 are referenced to Well 2's Induction Electrical Log dated 11/1/1965. Well 4B depths are referenced to Well 4B's High Res Induction Neutron/Density Directional Survey Log dated 5/24/2000.)

The injection interval shall be defined by the following correlative log depths:

<u>Well</u>	<u>Injection Interval</u>	<u>Depth of Injection Interval</u>
2	3000-foot:	2980' - 3220'
3	3000-foot:	2980' - 3220'
4B	3000-foot:	2978' - 3210'
	5300-foot:	5373' - 6166'
5	3000-foot:	2980' - 3220'

(All depths are approximate below ground level (BGL). Depths for Wells 2, 3, and 5 are referenced to Well 2's Induction Electrical Log dated 11/1/1965. Well 4B depths are referenced to Well 4B's High Res Induction Neutron/Density Directional Survey Log dated 5/24/2000.)

2. The volume injected into the 3000-foot injection interval during any given month shall not exceed the volume calculated by multiplying [the injection rate, 1500 gpm (gallons per minute)] x (60 minutes per hour) x (24 hours per day) x (the number of days in that month). The volume injected into the 5300-foot injection interval during any given month shall not exceed the volume calculated by multiplying (the injection rate, 1500 gpm) x (60 minutes per hour) x (24 hours per day) x (the number in the month).
3. The facility shall cease injection into Wells 2, 3, 4B, and 5 by June 30, 2016.
4. The characteristics of the injected waste stream shall for Wells 2, 3, 4B, and 5 at all times conform to those discussed in Section 6 and Table 6-1 of the Petition Reissuance document for Wells 2, 3, 4B, and 5. The running three whole month volume weighted average specific gravity of the waste stream injected into Wells 2, 3, 4B, and 5 shall remain within a range of 0.98 to 1.70 at 114°F and 1 atmosphere with a reference temperature of 60°F equivalent to a specific gravity range of 0.99 to 1.72 at 60°F and 1 atmosphere with a reference temperature of 60°F equivalent to a specific gravity range of 0.99 to 1.72 at 68°F and 1 atmosphere with reference temperature of 68°F equivalent to a specific gravity range of 0.98 to 1.70 at 114°F and 1 atmosphere with a reference temperature of 68°F. The running three month average shall be calculated by

multiplying each day's specific gravity value by that day's injected volume, totaling those values for the previous three whole calendar month period, and dividing by that three month injected volume. For the purpose of the above calculation, each day's specific gravity value shall be obtained by at least one representative grab sample.

5. This approval for injection is limited to the following hazardous wastes:

D001, D002, D003, D005, D009, D011, D018, D019, D021, D022, D029, D035, D038, D040, D043

F001, F002, F003, F004, F005, F039 (for constituents listed in Table 6-1 in Section 6 of the Reissuance Document)

K011, K013

P003, P005, P013, P021, P022, P029, P030, P063, P065, P069, P074, P076, P078, P092, P098, P099, P101, P104, P106, P120, P121

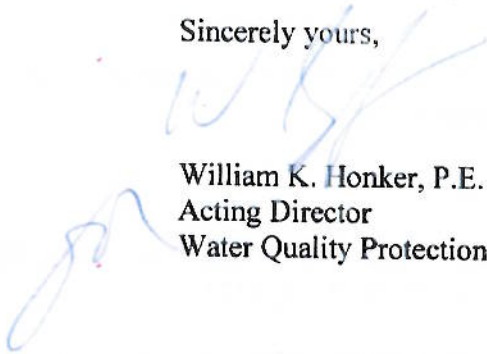
U001, U002, U003, U007, U008, U009, U019, U031, U037, U043, U044, U051, U053, U078, U079, U080, U088, U092, U117, U122, U123, U124, U133, U135, U140, U149, U151, U152, U154, U162, U196, U197, U202, U211, U220, U226, U228, U404

6. The facility must petition for approval to inject additional hazardous wastes which are not included in Condition No. 5, above. The facility must also petition for approval to increase the concentration of any waste which would necessitate the recalculation of the limiting concentration reduction factor and the extent of the waste plume. Petition reissuances and modifications should be made pursuant to §148.20 (e) or (f).
7. Cornerstone shall annually submit to EPA the results of a bottomhole pressure survey for Wells 2, 3, 4B, and 5. These surveys shall be performed after shutting in each well for a period of time sufficient to allow the pressure in the injection interval to reach equilibrium, in accordance with §146.68(e)(1). The annual report should include a comparison of reservoir parameters determined from the falloff test with parameters used in the approved no migration petition. Cornerstone shall also annually submit to EPA a radioactive tracer survey and annulus pressure test for Wells 2, 3, 4B, and 5.
8. Cornerstone shall notify EPA in the event that Well 2, 3, 4B, or 5 loses mechanical integrity, prior to any well work on Well 2, 3, 4B or 5 or if Cornerstone plans to plug Well 2, 3, 4B or 5. If any well work or plugging is being planned, Cornerstone shall also submit the procedures to EPA for review prior to commencing any work.
9. Upon the expiration, cancellation, reissuance, or modifications of the Louisiana Department of Natural Resources Underground Injection Control orders for Wells 2, 3, 4B, and 5, this exemption is subject to review. A new demonstration may be required if information shows that the basis for granting the exemption is no longer valid under 40 CFR §148.23 and §148.24.

In addition to the above conditions, this approval of a reissuance of an exemption to the land disposal restrictions is contingent on the validity of the information submitted in the Cornerstone reissuance request. This final reissuance decision is subject to termination when any of the conditions occur which are listed in 40 CFR §148.24, including noncompliance, misrepresentation of relevant facts, or a determination that new information shows that the basis for approval is no longer valid.

If you have any questions or comments, please call Phil Dellinger at (214) 665-7150.

Sincerely yours,



William K. Honker, P.E.
Acting Director
Water Quality Protection Division